## CLINTON COUNTY PROFILES IN PUBLIC HEALTH

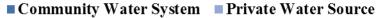
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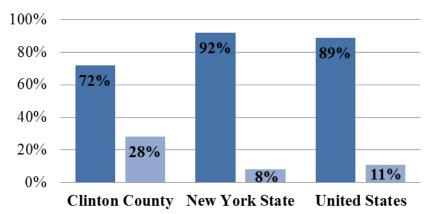
# DRINKING WATER IN CLINTON COUNTY

Drinking Water...Turn on a faucet and it appears. You cook with it, clean with it, and drink it. Most of us don't even think about whether or not our drinking water is safe. However, having access to clean, potable drinking water is one of the most important contributions to a community's overall health. More than 1 billion people worldwide do not have access to safe drinking water. The presence of contaminants in water can lead to adverse health effects and disease. The United States is fortunate to have some of the safest public drinking water supplies in the world.

The water you use daily can be provided to you in two very different ways. Either you get your water from a community (public) water system or from your own private source, such as a well. Public Water Systems (PWS) are regulated and have to adhere to strict standards. In Clinton County, the Clinton County Health Department (CCHD) works to ensure safe drinking water is provided to the residents served by PWS. Private water sources, such as wells, are not regulated by CCHD; individual homeowners are responsible to see that their water source is kept safe.

#### WATER SOURCE FOR RESIDENTS



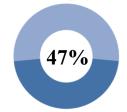


## CLINTON COUNTY WATER FACTS

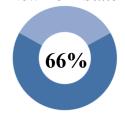
- The Clinton County Health Department regulates approximately 214 Public Water Systems (PWS).
- Of the 214 Public Water Systems in Clinton County, approximately 62 are Community Water Systems.
- Approximately 59,000 residents are served by Community Water Systems in Clinton County.
- A number of non-community systems such as schools, restaurants, and campgrounds also provide water to the public on a daily basis.
- The CCHD issued 110 boil water orders in 2015.
- In 2015, the CCHD received 2,066 total coliform bacteria test results; of these, 35 (1.7%) were positive, requiring appropriate follow-up.

# RESIDENTS RECEIVING FLUORIDATED WATER





**New York State** 



**United States** 



#### WATER SYSTEMS AND SOURCES

#### **Public Water Systems (PWS)**

Provide water to the public for human consumption (for drinking, bathing, showering, cooking, dishwashing, etc.) through pipes or other distribution systems. In NYS, any system that has at least 5 service connections or that regularly serves an average of at least 25 people daily for at least 60 days out of the year is considered a PWS.

#### **Non-Community Water Systems (NCWS)**

Provide water to the public, but do not generally serve the same people year-round.

#### **Transient Non-Community Water Systems**

Provide water to different people for more than 6 months out of the year. Examples include rest stops, parks, convenience stores and restaurants with their own water supplies.

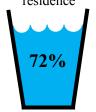
# Non-Transient Non-Community Water Systems

Provide water to the same people for more than 6 months per year. Examples include schools, colleges, hospitals and factories with their own water supplies.

#### **Community Water Systems (CWS)**

Provide water to the public year-round. These include municipally-owned (cities, towns, or villages) public water supplies and privately-owned water suppliers (such as homeowner associations, apartment complexes, and mobile home parks that maintain their own drinking water system).

Clinton County residents with public water supplied to their residence



Clinton County residents with private water (such as a drilled well or spring) at their residence

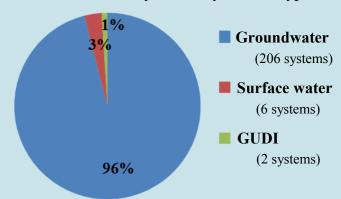


#### **SOURCES OF WATER**

#### **Definitions**

- Surface Water: Water that is open to the atmosphere and subject to surface run-off, such as lakes, rivers, and reservoirs.
- **Groundwater:** Water that is taken from beneath the earth's surface, such as drilled wells.
- Groundwater Under the Direct Influence of Surface Water (GUDI): Ground water that when tested, has physical characteristics that closely match surface water, or contains microorganisms or debris that are typically only found in surface water.

#### **Clinton County Water by Source Type**



#### WATER CONSERVATION

"All the water that will ever be is, right now."

~ National Geographic

Why is water conservation so important? While 70% of the earth's surface is covered by water, 97% of earth's water is salty or unusable and 2% is permanently frozen. This leaves only 1% of earth's water that is available for human needs. By taking steps such as fixing household leaks and taking shorter showers, you can make small changes that will make a big difference. Visit <a href="https://www3.epa.gov/watersense/our water/start saving.html">https://www3.epa.gov/watersense/our water/start saving.html</a> for more ideas on how you can save water.

### HOW DO I KNOW IF MY WATER IS SAFE?

All Public Water Systems must routinely monitor their water supply and system. The Clinton County Health Department (CCHD) oversees this process in Clinton County. In New York State, Subpart 5-1 *Public Water Systems* of the State Sanitary code establishes the requirements that PWS's must meet, and that the CCHD enforces.



#### PUBLIC WATER SYSTEM REQUIREMENTS

- Routinely test for **total coliform bacteria** (see sidebar). Each PWS collects samples from their water supplies to test for the presence OR absence of total coliform bacteria. The amount of samples required is determined by the type of the PWS (i.e., community vs. non-community) and how many people the system serves. For example, the minimum requirement for testing is one (1) sample per quarter for a small PWS, such as a restaurant that has its own water supply, compared to the City of Plattsburgh which collects twenty (20) samples per month.
- Collect a minimum of one (1) **nitrate** sample per year (see sidebar).
- Sample for other chemicals or contaminants, depending on the type and size (population served) of the PWS.
   Contaminants that may be tested for include: lead and copper, disinfection by-products, chemical contaminants, metals, and radiological contaminants.
- Disinfect the water supply (unless a waiver from disinfection is obtained).
- Submit water system Operation Report forms quarterly or monthly.
- Maintain and operate the water system in compliance with Subpart 5-1.

#### **Total Coliform Bacteria**

Testing for bacteria is the only reliable way to know if your water is safe. You can not tell by the look, taste, or smell of the water if disease causing organisms are in it. Total coliforms include bacteria that are found in the soil, in water that has been contaminated by surface water, and in human and animal wastes. Testing for total coliform bacteria can be a reasonable indication of whether other pathogenic bacteria (germs that cause disease) are present, such as E.coli bacteria.

#### **Nitrates**

Nitrates are most commonly used in fertilizers and can occur in or enter water supplies from run-off from fertilizers, failing septic systems, and animal wastes. The primary health hazard from nitrates is for infants under 6 months of age who drink water containing nitrates in excess of 10 milligrams per liter (mg/L). Infants that drink water with nitrates can become seriously ill, and if untreated, may die. Symptoms include shortness of breath which is also called "blue baby syndrome."

#### MOBILIZING ACTION

# RECOMMENDATIONS FOR RESIDENTS, HEALTH PROFESSIONALS AND COMMUNITY LEADERS

#### **Residents**

- Be informed about your drinking water supply.
- Support your local water supply.
- Homeowners with a private water source (such as a well):
  - Test water for coliform bacteria at least once each year using a NYS Certified lab.
  - Collect a nitrate sample if a newborn resides in the home.
  - For information on wells, coliform bacteria, approved testing labs, and other water quality information, visit www.clintonhealth.org/wells.
- Conserve water.

#### **Healthcare Professionals**

- Actively engage patients and their families in discussions around their drinking water supply.
- Encourage patients with private water sources to properly maintain their water supply.
- Refer patients with questions about their water supply to CCHD Environmental Health & Safety Division at (518) 565-4870.
- Ensure families have access to fluoridated water; if they do not, prescribe fluoride supplements.
- Educate the community and its leaders on the importance of safe drinking water.
- Support safe drinking water and water conservation initiatives.

#### **Community Leaders**

- Ensure access to safe drinking water throughout the community.
- Plan for repairs, infrastructure replacement, and water emergencies.
- Support policies and legislation that protect the community's drinking water supplies.
- Advocate for fluoridated water systems.
- Support investment into the water system infrastructure.
- Partner with community agencies to promote community interest in a career as a Water Operator to maintain a qualified workforce.

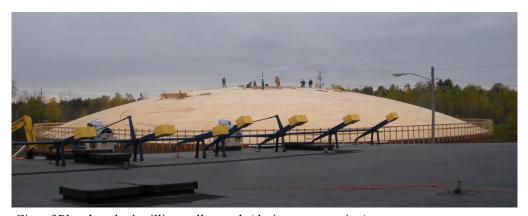
# DRINKING WATER STORAGE TANKS IN CLINTON COUNTY



Rouses Point, 1.5 million gallon tank.



Morrisonville, 200,000 gallon tank.



City of Plattsburgh, 4 million gallon tank (during construction).

Note: Clinton County does not discriminate on the basis of race, color, national origin, gender, sexual orientation, religion, age, or disability in employment or the provision of services.



Clinton County Health Department 133 Margaret Street

Plattsburgh, NY 12901



**Public Health** 

Phone (518) 565-4840 · Fax (518) 565-4717

www.ClintonHealth.org











